

REMARKS

Applicants respectfully request further examination and reconsideration in view of the above amendments and the comments set forth fully below. Claims 27-30 and 35 were pending. Within the Office Action, Claims 27-30 and 35 have been rejected. By the above amendment, Claim 35 has been amended and new Claims 36-44 have been added. Accordingly, Claims 27-30 and 35-44 are now pending.

Objections To The Claims

Within the Office Action, Claim 35 has been objected to because “hold” should be “hole.” By the above amendment, Claim 35 has been amended to change the term “hold” to “hole.”

Rejections Under 35 U.S.C. § 112

Within the Office Action, Claims 27-30 and 35 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, it is stated within the Office Action that there is no support for maintaining a consistent flow through the bored interior during a flushing procedure by only forming a pressure differential to expel material from the vial. The applicants respectfully disagree.

Within the specification it is taught that

[w]hen in an active state, the waste tube system 430 purges the material from the corresponding bank of vials. During the active state, the mobile tube 500 rises above the bottom portion of the chamber bowl 400 towards the drain plate 410. The drain plate 410 is rotated over to position a drain corresponding to the bank to be flushed, above the waste tube system 430. The mobile tube 500 then couples to this drain and the material is flushed out of the corresponding bank of vials and into the drain plate 420. The reagent solution is purged from the corresponding bank of vials due to a sufficient pressure differential between a top opening 610 (Figure 6) and a bottom opening 640 (Figure 6) of each vial. This sufficient pressure differential is preferably created by coupling the mobile waste tube 500 to the corresponding drain. [Specification, page 12, lines 13-22, emphasis added]

It is further taught within the specification that

[e]ach bank of vials has a drain and can be selectively purged. To perform a purging operation, the drain of the corresponding bank of vials is coupled to a mobile waste tube. After coupling the drain to the mobile waste tube, a pressure differential is formed and the material within each of the vials within the corresponding bank of vials is expelled. [Specification, page 15, lines 8-11, emphasis added]

To purge material from a bank of vials, the motor 445 rotates the cartridge 170 in response to the computer system 800 such that the drain corresponding to the bank of vials to be purged is positioned above the waste tube system 430. The mobile waste tube 500 is then raised to engage the drain and the material within the bank of vials is expelled from the vials through the waste tube system 430. [Specification, page 16, lines 22-26, emphasis added]

Accordingly, from at least the above passages from the specification, there is support for maintaining a consistent flow through the bored interior during a flushing procedure by only forming a pressure differential to expel material from the vial. Therefore, it is respectfully requested that the rejection of Claims 27-30 and 35 under 35 U.S.C. § 112, first paragraph, be withdrawn.

Rejections Under 35 U.S.C. § 102

Within the Office Action, Claims 27-30 and 35 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,215,500 to Bittner (hereinafter "Bittner"). The applicants respectfully disagree. Bittner teaches a laboratory mixer-separator. The mixer-separator taught by Bittner includes a tip end 11, a tube 10 and an open ended cylinder 12. Adjacent the tip end 11 of tube 10, a glass wool filter 16 is disposed. [Bittner, col. 2, lines 63-64] In operation, when holding materials for mixing, Bittner teaches that the device is held in a generally horizontal position. [Bittner, col. 3, lines 9-21, Figure 2] Bittner teaches that to empty the material from the device, the device is positioned in a generally vertical position, which causes the contents to flow down the tube by force of gravity through the filter 16 and out of the tip 11. [Bittner, col. 3, lines 25-33, Figure 1] Bittner does not teach that the material is retained above the filter 16, as Bittner teaches that gravity causes the material to flow down the tube, through the filter 16 when the device is positioned in a generally vertical position. Bittner does not teach that material is retained *above* a frit. Bittner also does not teach that a consistent flow is maintained through a bored interior during a flushing procedure by only forming a pressure

differential to expel material from the vial. Bittner does not teach a flushing procedure. The tube of Bittner is emptied when the device is positioned in a generally vertical position due to gravity. There is no need to generate a pressure differential to expel material from the tube of Bittner.

In contrast to the teachings of Bittner, the independent Claim 27 is directed to a vial comprising a bored interior having a consistent dimension configured to hold a frit for retaining material within the vial above the frit and maintain a consistent flow through the bored interior during a flushing procedure by only forming a pressure differential to expel material from the vial. As discussed above, Bittner does not teach that material is retained within the vial *above* the frit. Further, Bittner also does not teach that a consistent flow is maintained through the bored interior during a flushing procedure by only forming a pressure differential to expel material from the vial. For at least these reasons, the independent Claim 27 is allowable over the teachings of Bittner.

Claim 28 is dependent on the independent Claim 27. As described above, the independent Claim 27 is allowable over the teachings of Bittner. Accordingly, the Claim 28 is also allowable as being dependent on an allowable base claim.

The independent Claim 29 is directed to a vial comprising an exterior dimension configured to fit within a receiving hole of a cartridge thereby providing a pressure-tight seal between the vial and the cartridge and a bored interior having a consistent dimension to maintain a consistent flow through the bored interior during flushing procedures by only forming a pressure differential to expel material from the vial. As discussed above, Bittner does not teach that a consistent flow is maintained through the bored interior during flushing procedures by only forming a pressure differential to expel material from the vial. For at least these reasons, the independent Claim 29 is allowable over the teachings of Bittner.

Claim 30 is dependent on the independent Claim 29. As described above, the independent Claim 29 is allowable over the teachings of Bittner. Accordingly, the Claim 30 is also allowable as being dependent on an allowable base claim.

The independent Claim 35 is directed to a vial. The vial of Claim 35 comprises a bored interior having a consistent dimension configured to hold a frit for retaining material above the frit and maintain a consistent flow through the bored interior during a flushing procedure by only forming a pressure differential to expel material from the vial, a top opening through which material is dispensed into the bored interior, a bottom opening of a diameter to retain material within the bored interior when no pressure differential is applied and through which material is flushed during the flushing procedure and an exterior dimension configured to form a pressure-

tight seal between the vial and a cartridge when the vial is inserted into a receiving hole of the cartridge. As discussed above, Bittner does not teach that material is retained within the vial *above* the frit. Further, Bittner also does not teach that a consistent flow is maintained through the bored interior during a flushing procedure by only forming a pressure differential to expel material from the vial. For at least these reasons, the independent Claim 35 is allowable over the teachings of Bittner.

Within the Office Action, Claims 27-30 and 35 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,874,691 to Chandler (hereinafter “Chandler”). The applicants respectfully disagree. Chandler teaches devices for immunoassays which employ a reusable syringe or vacuum manifold to withdraw samples through a membrane. Chandler teaches that a membrane is supported in an assembly which interfaces with a syringe or other device for creating a pressure gradient. [Chandler, col. 2, lines 53-64, Figures 2 and 3] Chandler teaches that reagents or samples are held within the chamber until a vacuum is applied. [Chandler, col. 4, line 55 - col. 5, line 12] Once the vacuum is applied, Chandler teaches that all of the materials within the chamber are drawn through the membrane. [Chandler, col. 4, line 55 - col. 5, line 12] Chandler does not teach that material is retained above the membrane during and after the vacuum is applied. Chandler also does not teach that vials are held by a pressure-tight seal within a receiving hole of a cartridge.

In contrast to the teachings of Chandler, the independent Claim 27 is directed to a vial comprising a bored interior having a consistent dimension configured to hold a frit for retaining material within the vial above the frit and maintain a consistent flow through the bored interior during a flushing procedure by only forming a pressure differential to expel material from the vial. As discussed above, Chandler does not teach that material is retained within the vial. For at least these reasons, the independent Claim 27 is allowable over the teachings of Chandler.

Claim 28 is dependent on the independent Claim 27. As described above, the independent Claim 27 is allowable over the teachings of Chandler. Accordingly, the Claim 28 is also allowable as being dependent on an allowable base claim.

The independent Claim 29 is directed to a vial comprising an exterior dimension configured to fit within a receiving hole of a cartridge thereby providing a pressure-tight seal between the vial and the cartridge and a bored interior having a consistent dimension to maintain a consistent flow through the bored interior during flushing procedures by only forming a

pressure differential to expel material from the vial. As discussed above, Chandler does not teach that a pressure-tight seal is provided between the vial and a receiving hole of a cartridge. For at least these reasons, the independent Claim 29 is allowable over the teachings of Chandler.

Claim 30 is dependent on the independent Claim 29. As described above, the independent Claim 29 is allowable over the teachings of Chandler. Accordingly, the Claim 30 is also allowable as being dependent on an allowable base claim.

The independent Claim 35 is directed to a vial. The vial of Claim 35 comprises a bored interior having a consistent dimension configured to hold a frit for retaining material above the frit and maintain a consistent flow through the bored interior during a flushing procedure by only forming a pressure differential to expel material from the vial, a top opening through which material is dispensed into the bored interior, a bottom opening of a diameter to retain material within the bored interior when no pressure differential is applied and through which material is flushed during the flushing procedure and an exterior dimension configured to form a pressure-tight seal between the vial and a cartridge when the vial is inserted into a receiving hole of the cartridge. As discussed above, Chandler does not teach that material is retained within the vial. Further, Chandler does not teach that a pressure-tight seal is provided between the vial and a cartridge. For at least these reasons, the independent Claim 35 is allowable over the teachings of Chandler.

Applicants respectfully submit that the claims, as amended, are now in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
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Dated: March 15, 2004

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